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00 18 22 15 CDR Houston, Apollo 8.

00 18 22 18 CC Apollo 8, Houston. Go. Reading you weak, but clear.

00 18 22 22 CDR Roger. Our sighting schedule is complete, and I'm maneuvering to PTC attitude.

00 18 22 28 CC Roger. Copy.

00 18 42 03 CDR Houston, Apollo 8. Over.

00 18 42 05 CC Apollo 8, Houston. Go.

00 18 42 09 CDR Roger. I'm at the PTC maneuver now. Like a distance status from you - how the battery looks and how the fuel cells look and et cetera. Over.

00 18 42 23 CC Roger.

00 18 43 21 CC Apollo 8, Houston.

00 18 43 24 LMP Go ahead.

00 18 43 26 CC Apollo 8, this is Houston. We figure battery B will be charged in about 2 to 3 hours. All your systems look GO; your RCS usage so far is about 60 pounds, six-zero pounds over nominal. Over.

00 18 43 45 LMP Roger. How about fuel cell 2; is that looking all right now?

00 18 43 50 CC Roger. Fuel cells are all looking good.

00 18 43 54 LMP Okay. We're going to have two of us hit the hay now and one man minding the store so you might have everybody keep an extra sharp eye on ...

00 18 44 09 CC Roger, Bill. You think you're going to be able to sleep okay?

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00 18 44 12 LMP Yes. I think we kinda warmed up to a good sleep here by now.

00 18 44 20 CMP Houston, Apollo 8.

00 18 44 22 CC Go ahead.

00 18 44 24 CMP Onboard navigation indicates a pericynthian altitude of 38.4 miles.

00 18 44 32 CC Understand; 38.4 miles.

00 18 44 38 CMP That's affirmative. It's on the DSKY right now, if you're reading it.

00 18 44 42 CC Roger. Copy.

00 18 47 37 CC Apollo 8, Houston.

00 18 47 42 LMP Go ahead, Houston.

00 18 47 43 CC Apollo 8, Houston. Be advised your downlink now is getting very noisy.

00 18 49 52 CC Apollo 8, this is Houston with some comments on navigation.

00 18 49 59 CDR Go ahead, Houston.

00 18 50 02 CC Good morning, Frank. Apollo 8, this is Houston. We're wondering about your GDC backup align; we'd like your opinion on the possibility of doing this align using Sirius and Rigel rather than Navi, as it's in the north set at this time. Over.

00 18 50 31 CMP Stand by one.

00 18 50 33 CC Roger.

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00 18 51 06 CMP Houston, this is Apollo 8. We concur. Sirius and Rigel would be two stars that would be much better than Navi and Polaris. However, I did Cassiopeiae after I became adapted, but I'm afraid that the time required to do that type of alignment would be extensive if we ever had to go to that alignment.

00 18 51 33 CC Roger, Jim. We understand. We'll go ahead and work in that direction, and we'll quit bothering you. Good night.

00 18 53 02 CC Apollo 8, this is Houston.

00 18 53 07 CDR Go ahead, Houston. Apollo 8.

00 18 53 10 CC Apollo 8, Houston. At 19 GET, we're due for another cycle through on the cryo fans. Over.

00 18 53 19 CDR Roger.

00 18 53 23 CC Roger. Give us a call when you're complete.

00 18 53 30 CDR Roger.

END OF TAPE

APOLLO 8 AIR-TO-GROUND VOICE TRANSCRIPTION

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00 19 02 33	CDR	Houston, Apollo 8.
00 19 02 35	CC	Apollo 8, Houston. Go.
00 19 02 40	CDR	Give me a call when it is time to quit charging the battery, will you? I can't watch it very well over there.
00 19 02 44	CC	Wilco.
00 19 02 50	CDR	And I'm starting with the fans now.
00 19 02 53	CC	Roger. Copy.
00 19 02 55	CDR	Hydrogen 1 first.
00 19 02 58	CC	Roger.
00 19 11 23	CDR	Okay, Houston. We cycled through the fans 2 minutes each, and we'll stand by for the call for battery charges.
00 19 11 28	CC	Roger.
00 19 11 40	CC	Apollo 8, Houston. The battery charge will be complete around 21 hours.
00 19 11 46	CDR	Okay. Just give me a call.
00 19 11 48	CC	Okay.
00 19 30 38	CDR	Houston, Apollo 8.
00 19 30 41	CC	Apollo 8, Houston. Go.
00 19 30 51	CC	Apollo 8, Houston. Go.
00 19 30 55	CDR	Houston, Apollo 8.
00 19 30 58	CC	Apollo 8, Houston. Go.
00 19 31 08	CC	Apollo 8, Apollo 8, Houston. Go.
00 19 31 40	CC	Apollo 8, Houston. Go ahead.
00 19 32 00	CDR	Houston, Apollo 8.

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00 19 32 23 CC Apollo 8, this is Houston. Go ahead.

00 19 32 37 CC Apollo 8, Houston. Go ahead.

00 19 33 00 CC Apollo 8, Houston. Go ahead.

00 19 33 03 CDR Roger, Houston. Crew status report here. We're
behind on water and food, and we don't seem to
have too much of an appetite. We're trying to
stay up with the water, but the food is - not
that there's anything wrong with the food, but
we're just not very hungry.

00 19 33 25 CC Roger. Understand, Frank.

00 19 33 29 CDR The CDR got 5 hours of fitful sleep and rest,
and the other two people are trying to sleep
now.

00 19 33 36 CC Roger.

END OF TAPE

APOLLO 8 AIR-TO-GROUND VOICE TRANSCRIPTION

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00 20 57 46	CC	Apollo 8, Houston.
00 20 57 52	CDR	Go ahead, Houston. Apollo 8.
00 20 57 54	CC	Apollo 8, this is Houston. At 21 hours, we'd like you to terminate the battery B charge and start battery A charge and then begin an O ₂ purge. Over.
00 20 58 10	CDR	Roger. Understand; terminate battery B, start battery A, and an O ₂ purge.
00 20 58 13	CC	Roger. O ₂ fuel cell purge.
00 20 58 17	CDR	Thank you.
00 21 00 47	CDR	Houston, Apollo 8. We are now charging battery A, and say again about the purge.
00 21 01 03	CC	Apollo 8, Houston. Roger. Copy your battery charge setup; now begin a fuel cell O ₂ purge. Over.
00 21 01 13	CDR	Fuel cell O ₂ purge. Roger.
00 21 09 09	CDR	Houston, the fuel cells are all purged.
00 21 09 15	CC	Roger, Frank.
00 21 09 27	CDR	How's the tracking coming, Jerry?
00 21 10 23	CDR	Houston, Apollo 8.
00 21 10 28	CC	Apollo 8, Houston.
00 21 10 31	CDR	How's the tracking looking?
00 21 10 33	CC	It's looking good, Frank. We just took in another batch of data, and we are processing it. It looks initially like we won't even need a midcourse number 2. As soon as we

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process this data, we will have some confirmation for you. It should take anywhere from 15 to 30 minutes to finish the job.

00 21 10 53 CDR

Thank you.

00 21 13 39 CC

Apollo 8, Houston.

00 21 13 43 CDR

Go ahead.

00 21 13 45 CC

Apollo 8, this is Houston. We are showing your pericynthian 64 nautical miles. Your next mid-course at 28 will be less than 1 foot per second. We will have a firm confirmation on this in about 2 hours.

00 21 14 02 CDR

Roger.

END OF TAPE

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00 22 41 24 CDR Houston, Apollo 8.

00 22 41 26 CC Apollo 8, Houston. Go ahead.

00 21 41 29 CDR How do you read?

00 21 41 31 CC Reading you loud and clear, Frank. Good morning. How are you doing?

00 21 41 34 CDR Just fine. We just broke lock for a minute, and I wondered why.

00 21 41 38 CC Roger.

00 21 43 14 CC Apollo 8, Houston.

00 21 43 17 CDR Go ahead.

00 21 43 20 CC Roger. Your break lock is due to the fact we switched our antennas over from Honeysuckle to Madrid. Over.

00 21 43 28 CDR Roger. Thank you.

00 23 11 48 CC Apollo 8, this is Houston. Over.

00 23 11 53 CDR Go ahead, Houston. Apollo 8.

00 23 11 55 CC Roger, Frank. We would like to bring you up to date on your trajectory. This midcourse coming up at 28 hours GET turns out to be very small, 0.7 feet per second, and we would like not to do it. Our data is looking extremely good and extrapolating it forward; it shows the midcourse number 4 at LOI minus 8 hours would be about 4 feet per second. In the meantime, the free return trajectory is looking very good with a water splash point off the

coast of Africa. So it looks like you are right down the old center line, and we propose not to do the next midcourse. Over.

00 23 12 37 CDR Fine with us.

00 23 12 40 CC Okay. And in regard to your timeline here, we suggest that you let Bill and Jim sleep for an extra period of time and don't wake them up until 26:30 GET, and that would cause deletion of P52 and P23 at 26 hours GET. Over.

00 23 13 08 CDR Roger. Understand. Delete P52 and P23.

00 23 13 12 CC Affirmative. Delete those at 26 hours, wake the other two guys up at 26:30 at which time they can eat, and then chlorinate the water supply after they have eaten.

00 23 13 29 CDR Roger.

00 23 13 30 CC That would put us back on our nominal flight plan at 28 hours GET. Over.

00 23 13 38 CDR Roger.

00 23 13 43 CC How's all that grab you?

00 23 13 47 CDR Fine.

00 23 13 50 CC Okay.

00 23 38 39 CC Apollo 8, Houston. Over.

00 23 38 43 CDR Go ahead, Houston.

00 23 38 45 CC Roger. We're switching antennas again at 23:40 GET. You can expect a momentary break lock, and also we would like to bring you up to date on the passive thermal control. We

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expect to keep the same PTC attitude until
28 hours GET. Over.

00 23 39 05 CDR Fine; thank you. How is the thermal control
working?

00 23 39 10 CC Working good, Frank. I can give you some details
if you want it.

00 23 39 18 CDR Go ahead.

00 23 39 39 CDR I am all ears, Houston. Go ahead with the
details.

00 23 39 42 CC Okay. Stand by one until we switch our antennas,
Frank. We'll be right with you.

00 23 39 50 CDR Roger.

00 23 40 41 CC Apollo 8, Houston. Over.

00 23 40 43 CDR Go ahead.

00 23 40 45 CC On your PTC, quads A, C, and D seem to be just
about identical. Quad B is running slightly
cooler, but only very slightly so. The tem-
perature readouts in all respects are normal,
so apparently the PTC is working well from a
thermal viewpoint. And as far as the fuel con-
sumption goes, it's minimal, just about like we
expected. Have you got any comments about PTC?
How does it seem to you?

00 23 41 13 CDR Seems fine. Seems to be working all right, just
like you said. I was just wondering how the
readouts from the SPS were, too.

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00 23 41 48

CC

Apollo 8, Houston. The SPS temperature is normal. If anything, it's slightly warmer than we expected, so you are in real good shape in that respect.

00 23 41 59

CDR

Thank you.

00 23 42 19

CC

Frank, the PU valve temperature is running about 72 degrees, which is better control that we got here in this room.

00 23 42 29

CDR

Roger.

END OF TAPE

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00 23 47 21 CC Apollo 8, Houston. Over.

00 23 47 25 CDR Go ahead, Houston. Apollo 8.

00 23 47 28 CC Roger. It is time to do a cryo fan cycle, Frank,
on all four fans, a short burst from each of them
as you did before.

00 23 47 37 CDR Understand; 2 minutes each on all cryo fans.

00 23 47 39 CC Roger.

00 23 55 12 CDR Cryo fans OFF and cycled, Houston.

00 23 55 24 CC Apollo 8, Houston. Go ahead. Over.

00 23 55 29 CDR I said the cryo fans are OFF and completed the
cycle.

00 23 55 35 CC Okay. Thank you, Frank.

01 00 24 18 CC Apollo 8, Houston. Over.

01 00 24 22 CDR Go ahead, Houston. Apollo 8.

01 00 24 24 CC Roger. Just a COMM check, Frank. Do you read
me all right?

01 00 24 28 CDR Loud and clear.

01 00 24 30 CC Same here.

01 00 24 32 CDR Thank you.

01 00 42 55 CDR Houston, Apollo 8.

01 00 42 59 CC Apollo 8, this is Houston. Go.

01 00 43 03 CDR How've you been reading our tape dumps?

01 00 43 06 CC Stand by one, Frank. We noticed that you've
got your PTC attitude peaked up a bit, and I'll
check on your tape dump.

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01 00 43 41 CC Apollo 8, Houston. The quality of the tape dumps
has been very good. We have about 15 minutes to
dump, which we will do the next time we get high
gain. Over.

01 00 43 52 CDR How's the voice quality been?

01 00 43 56 CC It's been very good, Frank.

01 00 44 00 CDR Okay. We'll send you something down here shortly.

01 00 47 15 CC Apollo 8, Houston. Over.

01 00 47 18 CDR Go ahead, Houston.

01 00 47 21 CC Frank, on this tape recorder, we have the tape
motion stopped right now. If you would like to
record some, we will give you the tape in motion
so that you may do so. Is that what you would
like? Over.

01 00 47 31 CDR Roger. Houston, why don't you just give us salvo
so we can control the switches here.

01 00 47 40 CC Okay. Stand by.

01 00 47 41 CDR ... PCM LOW and stop.

01 00 47 53 CC You should have it now. Over.

01 00 47 59 CDR Roger.

01 00 53 52 LMP Houston, Apollo 8.

01 00 53 59 CC Apollo 8, Houston. Over.

01 00 54 02 LMP Houston, Apollo 8. Over.

01 00 54 05 CC Apollo 8, this is Houston. Over.

01 00 54 09 LMP Roger. Are you capable of taking a high-bit FM
dump for voice on the OMNI's?

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01 00 54 19 CC That is negative, Bill. Not quite, on the OMNI's.

01 00 54 26 LMP Okay. We will catch you next time around then.

01 00 54 29 CC Roger. Thank you..

01 00 54 32 CMP Good morning, Mike. How are things going down there?

01 00 54 35 CC Hi, Jim. Things are going real fine. How are you doing up there? Did you get a good night's sleep?

01 00 54 41 CMP Oh, you know. The first night in space all the time; it's a little slow.

01 00 54 46 CC The old man woke you up earlier than he needed to.

01 00 54 51 CMP Well, we just couldn't sleep any longer.

01 00 54 55 CC Roger. Understand.

01 00 55 07 CC Apollo 8, Houston. The next time you are locked up on the high gain, give us a call, and we will configure for a dump. Over.

01 00 55 16 LMP Roger. We would like an evaluation of the voice comments. Over.

01 00 55 21 CC Roger. Understand. So far, it's been very good. We will evaluate this one as soon as we can.

01 00 55 44 LMP How are the systems looking down there, Houston?

01 00 55 48 CC Apollo 8, Houston. Go ahead.

01 00 55 53 LMP Roger. I've been in the sack. How do the systems look?

01 00 55 56 CC Everything is looking real good, Bill.

01 00 56 00 LMP Okay. How much longer do you expect on charging battery A?

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01 00 56 11 CC Stand by, Bill. We will get you an exact number on it.

01 00 56 16 LMP Just a rough estimate. And also, have you seen any more hints on that sensor problem on fuel cell 2?

01 00 56 28 CC Stand by one. I'll get the latest scoop on it for you, Bill.

01 00 56 56 CC Bill, there is nothing new on fuel cell number 2. We don't think there is anything at all wrong with the fuel cell. It's some sort of a sensor problem, but we don't have any new information on it.

01 00 57 06 LMP Okay. They all look pretty good from here, Mike.

01 00 57 11 CC Roger. Thank you.

01 00 57 18 CC I've got some updates for you whenever you are ready to copy.

01 00 57 24 LMP Stand by.

01 00 57 26 CC Okay.

01 00 57 31 LMP What kind?

01 00 57 33 CC Well, I've got a TLI plus 35 hour update, and then I have an update to Jim's checklist.

01 00 57 49 LMP Let's have the TLI plus 30 before we get the checklist update.

01 00 57 54 CMP They never give up on the checklist, do they?

01 00 57 57 CC Okay. This - when you get your maneuver PAD book out - the last maneuver PAD we gave you

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for the flyby PAD still remains valid. We would just like to remark that the entry angle, the Gamma, is slightly steeper than we consider ideal, but it's within our - sort of the noise level of our ability to predict at this time. So that flyby maneuver PAD remains valid. Over.

01 00 58 28 CMP

Roger, Houston.

01 00 58 30 CC

Okay. Now on that page with the flyby maneuver, under your north set of stars, I have some new numbers for you because we've changed those stars from Havi and Polaris. As you recall, we changed to Sirius and Rigel, so - And that also, by the way, is the checklist update which I will give you later - but on that maneuver PAD, I have got three new angles for you using Sirius and Rigel when you are ready to copy those.

01 00 59 56 CC

Apollo 8, Houston. How do you read? Over.

01 01 01 01 CC

Apollo 8, Houston. Over.

01 01 01 21 LMP

Houston, Apollo 8. Over.

01 01 01 23 CC

Roger, Apollo 8. Houston. You are loud and clear now. We had a lot of background noise there for a few minutes. How are you reading me?

01 01 01 31 LMP

Roger. I'm reading you okay, Mike, and I read you the last time you asked me that, so I guess maybe I wasn't getting through to you.

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01 01 01 39 CC Okay. Well, did you copy on this flyby maneuver PAD? We've got three new angles. Are you ready to copy those?

01 01 01 47 LMP I'm ready to copy the flyby angles.

01 01 01 49 CC Okay. Roll 137, pitch 310, yaw 340. Over.

01 01 02 05 LMP Roger. Roll 137, pitch 310, yaw 340.

01 01 02 11 CC That's affirmative, and I have the TLI plus 35 hour PAD when you are ready for it.

01 01 02 19 LMP Roger. Ready for the TLI plus 35.

01 01 02 23 CC Roger. TLI plus 35 hours, SPS/G&N, 63023 minus 162 plus 129. Are you with me so far?

01 01 02 46 LMP Loud and clear.

01 01 02 49 CC Good. 037 56 5138, plus 00068, plus 00000, plus 46420 178 134 001, not applicable, plus 00202 46420 547 46211. Are you with me? Over.

01 01 04 01 LMP Roger. Loud and clear.

01 01 04 03 CC Good. 12 1383 327 023 up 172 left 22, plus 1293, minus 16500, 12905 36180 074 11 16. Comments: on your stars Sirius and Rigel, roll 010, pitch 294, yaw 320, no ullage. Other: one, fast return P37, DELTA-V equals 7821, for mid-Pacific landing for MTL; two, high speed procedures not required. Over.

01 01 05 58 LMP Roger. Are you ready for the readback?

01 01 06 01 CC All set.

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01 01 06 04 LMP TLI plus 35, SPS/G&N 63023, minus 162, plus 129
037 56 5138, plus 00068, plus 00000, plus 46420
178 134 000, NA. Are you with me?

01 01 06 35 CC Yes, I'm with you, Bill. That last one should
be 001.

01 01 06 42 LMP Roger. Y 001, NA, plus 00202 46420 547 46211 12
1383 327 023 up 172 left 22, plus 1293, minus
16500, plus 12905, plus 36180 074 11 16. Sirius,
Rigel: 010 294 320, no ullage, fast return P37,
7821 mid-PAC; high speed not required. Over.

01 01 07 44 CC That's about the size of it. You're getting
pretty good at this thing, Bill, for a rookie.

01 01 07 51 LMP Not bad. I just learned to read about a year
ago.

01 01 07 55 CC Roger. Hey, I've got a flight plan update for
Jim. It's on page G, George, 82 Able of his
checklist. Over.

01 01 08 06 CMP Roger. I've got it open. Go ahead, Mike.

01 01 08 08 CC Okay. It's simply changing these north set of
stars around. For Navi substitute Sirius, which
is number 15, and for Rigel - correction - for
Polaris substitute Rigel, number 12.

01 01 08 31 CMP Roger. Substitute Rigel for Polaris and Sirius
for Navi. How about shaft and trunnion; remain
the same?

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01 01 08 38 CC Your shaft and trunnions remain the same. Sirius remains on the 50-degree line just like Navi used to be. Rigel is down 1.3 degrees from your horizontal, from your M-line. Over.

01 01 08 56 CMP Roger. Understand.

01 01 08 59 CC Okay. And let me know when it gets to be breakfast time. I've got a newspaper to read up to you and a few other things.

01 01 09 06 LMP We're ready.

01 01 09 11 CC Okay. I've got a Haney special here for you. The Interstellar Times latest edition says the flight to the moon is occupying prime space on both paper and television; it's THE news story. The headlines of the Post says "Moon, here they come". We understand that Bill Anders will be in private conversation or communication today with an old man who wears a red suit and lives at the North Pole. A suspect in the Miami kidnapping was captured late yesterday, and the 11 GI's that have been detained 5 months in Cambodia were released yesterday and will make it home in time for Christmas.

01 01 09 57 LMP Roger. With reference to the first, we saw him earlier this morning, and he was heading your way.

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01 01 10 03 CC Roger. We'll pass the word along. David
Eisenhower and Julie Nixon were married yesterday in New York. He was described as "nervous".

01 01 10 15 LMP Right.

01 01 10 18 CC The Browns took Dallas apart yesterday 31 to 20.
We're sort of curious, who do you like today,
Baltimore or Minnesota? Over.

01 01 10 29 CMP Baltimore.

01 01 10 31 CC How many points are you giving?

01 01 10 34 LMP (Laughter) He's not making many points at home
with that comment.

01 01 10 40 CC Roger. Understand. Oh, I've got another score
for you when you are ready to copy. Are you
ready to copy?

01 01 10 51 LMP Stand by. Go ahead.

01 01 11 06 CC Roger. Navy 14, Army 21. Would you like for me
to repeat that? Over.

01 01 11 14 LMP You are very garbled, Houston; I'm unable to
read. Will call you back in another year.

01 01 11 21 CC Okay. We also notice the University of Houston
lost their first home basketball game in
3-1/2 years last night. Illinois edged them
out 97 to 84. And some really big news: the
State Department announced only a few minutes
ago that the Pueblo crew will be released at
9 p.m. tonight.

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01 01 11 48 CMC Sounds good. Outboard calculations indicate that Apollo 8 at 25 hours is 104 000 miles from home.

01 01 12 00 CC Yes. Our plot board shows a similar number.

01 01 12 07 CDR Mighty nice view from here.

01 01 12 12 CC We're showing about 104 800 miles, and we're guessing another 8 to 10 hours on your battery charge.

01 01 12 23 LMP Okay.

01 01 12 35 CC Frank, say again about the view. You were blocked, I think.

01 01 12 41 CDR This is a mighty nice view we have down there today. A little bit more than a half earth. Looks like Africa and the Red Sea is visible; we're not quite sure as there is quite a bit of cloud cover; but even through the hazy windows, it's mighty nice.

01 01 12 58 CC How are your windows? Do you have a couple left that are real clear?

01 01 13 02 CDR The rendezvous windows are good. The others are all about the same as they were when we last reported. One and five have a slight haze and a little fog on the inside.

01 01 13 16 CC Roger. Understand.

01 01 16 55 CC Apollo 8, Houston. Over.

01 01 16 59 CMC ...

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01 01 17 01 CC Roger. Just as a matter of curiosity for Bill, we can say a few words about the heaters for the cryo tanks, and also for the fans. We've noticed that the heaters are doing their thing normally, cycling on and off; and as time goes by, this cycle rate increases, indicating a little bit of stratification in the tanks. And then when we've been burning the fans on every 4 hours for a couple of minutes, this stirs things up and the heaters then cycling on and off again more slowly for a while, until again a little bit of stratification occurs, and the cycling becomes slightly more rapid. This is, of course, normal; we just point it out as a curiosity to you. Over.

01 01 17 45 LMP Roger. I haven't really been following it that close. One thing I have noticed is when you turn the fans on you get a glitch in the quantity, which might correspond to a glitch in ac. Maybe the next time we'll look at the ac volts and see what happens.

01 01 18 14 CC Our experts say that's not the reason for the glitch. They say the stratification fakes out the capacitance sensor there for a second.

01 01 18 25 LMP I knew they would have some big deal answer for me.

01 01 18 31 CC ... got you today.

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01 01 18 32 LMP I'll buy that.
01 01 18 33 CMP Roger.
01 01 18 36 CC Any other information you want us to send up
to you?
01 01 18 43 LMP No, we're going to zap you with the high gain
here shortly.
01 01 18 46 CC Okay.
END OF TAPE

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01 01 19 36 LMP Houston, this is Apollo 8. How do you read on the high gain?

01 01 19 39 CC Reading you loud and clear, Bill. How me?

01 01 19 44 LMP I'm reading you loud and clear. I'll go ahead and dump this. You might want to listen to it in real time to evaluate the voice.

01 01 19 54 CC Okay. We'll do that as soon as we can.

01 01 19 57 LMP Give me a call when you are ready.

01 01 20 08 CC Do you want to dump it by your command, or would you like us to command the dump on it? Over.

01 01 20 15 LMP Oh, you can go ahead and command whenever you are ready.

01 01 20 18 CC Okay. We are starting now; thank you.

01 01 20 19 LMP I've already rewound.

01 01 20 20 CC Roger.

01 01 20 21 LMP Roger. I've already rewound.

01 01 21 02 LMP There is only about 5 minutes worth on the tape, Houston.

01 01 21 07 CC Roger. Understand, Bill. You promised me you would wait 3 days before you started doing this, Bill.

01 01 21 31 LMP It has been a long trip.

01 01 26 48 CC Apollo 8, Houston.

01 01 26 52 LMP Go ahead, Houston.

01 01 26 53 CC Roger, Bill. We've got your dump, and the voice quality is very good. We are going to take about

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20 minutes or so to get it back to Houston to play it.

01 01 27 11	LMP	Roger. Where are you taking it through, Houston?
01 01 27 15	CC	It comes through Madrid and then Ascension, Bill.
01 01 27 21	LMP	Okay.
01 01 40 56	CC	Apollo 8, Houston.
01 01 41 13	CC	Apollo 8, Houston. Over.
01 01 41 30	CC	Apollo 8, Houston. Over.
01 01 42 41	CC	Apollo 8, Houston. Over.
01 01 42 55	CC	Apollo 8, this is Houston. Over.
01 01 43 27	CC	Apollo 8, this is Houston. Over.
01 01 43 20	LMP	Houston, Apollo 8. How do you read?
01 01 43 32	CC	Roger, Bill. We are reading you loud and clear now. We had an antenna problem down here. We had an unexpected switch of antenna, which probably caused your high gain to quit.
01 01 43 47	LMP	Roger.
01 01 45 02	CC	Apollo 8, Houston. Over.
01 01 45 16	LMP	Go ahead, Houston. Apollo 8.
01 01 45 18	CC	Roger, Jim. When we lost our antenna down here, we interrupted your tape dump, so we are in the process of doing some rewinding and continuing the dump, in case Bill is wondering what is going on with the tape recorder.
01 01 45 33	CMP	Okay. No strain.
01 01 56 53	CC	Apollo 8, Houston. Over.